

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the Application.

1. (Canceled)
2. (Previously Presented) A device in accordance with Claim 45 further comprising a casing, said winding means being rotatably mounted to said casing.
3. (Original) A device in accordance with Claim 2, wherein said casing is sized and shaped so as to be gripped by a hand of a surgeon.
4. (Original) A device in accordance with Claim 3, wherein said winding means includes a winding tube rotatable about an axis, said winding tube being movable in an axial direction in response to its rotational movement.
5. (Original) A device in accordance with Claim 4, wherein said winding tube includes securing means for securing at least one portion of the suture thereto so as to cause the suture to wind about the helical member.
6. (Original) A device in accordance with Claim 5, wherein said securing means includes a groove formed in said winding tube and sized and shaped so as to receive at least one portion of the suture therein.
7. (Previously Presented) A device in accordance with Claim 6, wherein said groove is angled in a direction opposite to the direction of rotation of said winding tube during the winding of the suture about the helical member.
8. (Original) A device in accordance with Claim 7, wherein said winding tube includes a plurality of first screw threads formed thereon, said casing including a

plurality of second screw threads mating with said first screw threads such that said winding tube is movable in said axial direction in response to its rotational movement.

9. (Canceled)

10. (Previously Presented) A device in accordance with Claim 42, further comprising supporting means for supporting the helical member during the winding of the suture around the helical member.

11. (Previously Presented) A device in accordance with Claim 10, further comprising a guide tube mounted in said winding tube and rotatable relative thereto.

12. (Previously Presented) A device in accordance with Claim 11, wherein said guide tube includes a coiled spiral member at an end thereof, said spiral member being sized and shaped so as to receive the helical member therein during the winding of the suture about the helical member.

13. (Previously Presented) A device in accordance with Claim 12, wherein said guide tube is movable in said axial direction relative to said winding.

14. (Previously Presented) A device in accordance with Claim 13, wherein said guide tube has an opening extending through said spiral member, said opening being sized and shaped so as to receive the helical member therein.

15. (Previously Presented) A device in accordance with Claim 14, wherein said spiral member includes a plurality of lobes extending radially inwardly into said opening, said lobes forming a plurality of spaces positioned radially outwardly from said opening.

16. (Previously Presented) A device in accordance with Claim 15, wherein said guide tube includes a plurality of third screw threads formed thereon, said casing

including a plurality of fourth screw threads mating with said third screw threads such that said guide tube is movable in said axial direction in response to the rotational movement of said guide tube.

17. (Previously Presented) A device in accordance with Claim 16, wherein said guide tube includes a third gear mounted thereon, said casing including a second actuator movably mounted on said casing and adapted for manual actuation by a surgeon, said casing including a set of fourth gears, said third gear being engaged with one of said fourth gears, said second actuator being engaged with another of said fourth gears such that said third gear and hence said guide tube are rotatable in response to the movement of said second actuator.

18. (Previously Presented) A device in accordance with Claim 17, wherein said supporting means includes a support rod extending through said guide tube for positioning the helical member in said opening of said spiral member of said guide tube.

19. (Previously Presented) A device in accordance with Claim 18, wherein said support rod includes a distal end sized and shaped so as to engage the helical member.

20. (Previously Presented) A device in accordance with Claim 19, wherein said distal end of said support rod is sized and shaped so as to engage the helical member by a friction fit.

21. (Previously Presented) A device in accordance with Claim 19, wherein said support rod is sized and shaped so as to support at least one additional helical member thereon.

22. (Previously Presented) A device in accordance with Claim 21, further comprising advancing means for advancing the at least one additional helical member in said axial direction.

23. (Previously Presented) A device in accordance with Claim 22, wherein said advancing means includes a plunger mounted on said support rod, said plunger being movable in said axial direction.

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Previously Presented) A device in accordance with Claim, 45 wherein said guide tube is movable in an axial direction relative to said winding means.

30. (Previously Presented) A device in accordance with Claim, 45 wherein said supporting means comprises a support rod extending through said winding means for supporting the helical member in a fixed position relative to said winding means while said winding means winds the suture about the helical member.

31. (Previously Presented) A device in accordance with Claim 30, wherein said support rod includes a distal end sized and shaped so as to engage the helical member by a friction fit.

32. (Previously Presented) A device in accordance with Claim 30, wherein said support rod includes a distal end sized and shaped so as to engage a plurality of helical members.

33. (Canceled)

34. (Previously Presented) A device in accordance with Claim 46 wherein said winding means includes a winding tube rotatable about an axis, said winding tube movable in an axial direction in response to its rotational movement.

35. (Previously Presented) A device in accordance with Claim 34, wherein said winding tube includes securing means for securing at least one portion of the cord thereto so as to cause the cord to wind about the helical member, said securing means including a groove formed in said winding tube and sized and shaped so as to receive at least one portion of the cord therein, said groove being angled in a direction substantially opposite to the direction of rotation of said winding tube during the winding of the cord about the helical member.

36. (Canceled)

37. (Previously Presented) A device in accordance with Claim 43, wherein said guide tube is movable in said axial direction relative to said winding tube in response to the rotation of said guide tube.

38. (Previously Presented) A device in accordance with Claim 37, further comprising a supporting means for supporting the helical member during the winding of the suture around the helical member, said supporting means including a support rod extending through said guide tube for positioning the helical member in said spiral member of said guide tube.

39. (Currently Amended) A method of anchoring a suture used in a surgical procedure to a coiled helical member, comprising the steps of supporting the helical member relative to a winding tube; and attaching the suture to at least one turn of the

helical member by moving said winding tube relative to the helical member such that the suture is wound about the helical member in a helical path so as to attach the suture to at least one turn of the helical member.

40. (Currently Amended) ~~A method in accordance with Claim 39, wherein said~~ A method of anchoring a suture used in a surgical procedure to a coiled helical member, comprising the steps of supporting the helical member relative to a winding tube that is rotatable about an axis, said winding tube being movable in an axial direction in response to its rotational movement; and moving said winding tube relative to the helical member such that the suture is wound about the helical member in a helical path so as to attach the suture to at least one turn of the helical member.

41. (Previously Presented) A method in accordance with Claim 40, wherein said supporting step includes the step of positioning the helical member in a coiled spiral member of a guide tube.

42. (Previously Presented) A device for use in surgical procedure to anchor a suture to a coiled helical member, said device comprising winding means for winding a suture around the helical member in a helical path such that the suture is attached to at least one turn of the helical member, said winding means including

a winding tube rotatable around an axis, said winding tube including securing means for securing at least a portion of the suture thereto so as to cause the suture to wind about the helical member, said securing means including a groove formed in said winding tube that is sized and shaped so as to receive at least a portion of the suture therein, said groove being angled in a direction opposite to the direction of rotation of said winding tube during the winding of the suture around the coiled helical

member, said winding tube further including a plurality of first screw threads formed thereon, and a first gear mounted thereon; and

a casing that is sized and shaped so as to be gripped by the hand of a surgeon, said casing having

a plurality of second screw threads mating with said first screw threads such that said winding tube is mounted to said casing and rotatable relative thereto and movable in an axial direction in response to its rotational movement,

a first actuator movably mounted on said casing and adapted for manual activation by a surgeon, and

a set of second gears, said first gear being engaged with one of said second gears, said first actuator being engaged with another of said second gears such that said first gear and hence said winding tube are rotatable relative to said casing in response to the movement of said first actuator.

43. (Previously Presented) A device for anchoring a cord to a coiled helical member, said device comprising

winding means for winding a cord about the helical member in a helical path such that the cord is attached to at least one turn of the helical member, said winding means including a winding tube rotatable about an axis and movable in an axial direction in response to its rotational movement, said winding tube including securing means for securing at least a portion of the cord thereto so as to cause the cord to wind about the coiled helical member, said securing means including a groove formed in said winding tube that is sized and shaped so as to receive at least one portion of the cord therein, said groove being angled in a direction substantially opposite to the direction of

rotation of said winding tube during the winding of the cord about the coiled helical member; and

guiding means for guiding the winding of the cord in the helical path, said guiding means including a guide tube mounted in said winding tube and rotatable relative thereto, said guide tube including a coiled spiral member at an end thereof, said spiral member being sized and shaped so as to receive the helical member therein during the winding of the cord about the helical member.

44. (Canceled)

45. (Currently Amended) ~~A device in accordance with Claim 44,~~ A device for use in a surgical procedure to anchor a suture to a coiled helical member, said device comprising

winding means for winding the suture around the helical member in a helical path such that the suture is attached to at least one turn of the helical member;

supporting means for supporting the coiled helical member during the winding of the suture around the helical member; and

guiding means for guiding the winding of the suture in the helical path,

wherein said guiding means comprises including a guide tube including having a coiled spiral member at an end thereof, said spiral member being sized and shaped so as to receive the helical member therein during the winding of the suture about the helical member.

46. (Previously Presented) A device for anchoring a cord to a coiled helical member, said device comprising

winding means for winding the cord around the helical member in a helical path such that the cord is attached to at least one turn of the helical member;

guiding means for guiding the winding of the cord in the helical path, said guiding means including a guide tube having a coiled spiral member at an end thereof, said spiral member being sized and shaped so as to receive the helical member therein during the winding of the cord about the helical member; and

supporting means for supporting the helical member during the winding of the cord around the helical member, said supporting means including a support rod extending through said guide tube for positioning the helical member in said spiral member of said guide tube.

47. (New) A method in accordance with Claim 39, wherein said supporting step includes the step of positioning the helical member in a coiled spiral member of a guide tube.